

to be differences in details of vegetative structure and in the size of carpospores and tetraspores between the two sets of plants, but examination of a large series of specimens is required to make this certain. This question must remain to be settled in the future.

UNIVERSITY OF CALIFORNIA.

REPORTS ON THE FLORA OF THE BOSTON DISTRICT,—XXXIX.

LABIATAE.

AGASTACHE.

A. scrophulariaefolia (Willd.) Ktze. Rich woods, Oak Island, Revere (*Wm. Boott*, Aug. 16, 1861; other collectors down to 1908). A rare plant of rich woods, occasional in Berkshire county and Connecticut; this station probably now extinct.

AJUGA.

A. REPTANS L. Escaped on bank, Cambridge (*W. Deane*, June 6, 1910); spontaneous under shrubs in garden, S. Hanover (*Mrs. E. A. Josselyn*, June 17, 1904); reported from moist meadow in N. Easton by C. Blomberg in *RHODORA*, iv. 14, 1903.

BALLOTA.

B. NIGRA L. Dump, Cambridge (*W. Deane*, Oct. 10, 1885); Hull (*C. E. Perkins*, July 15, 1881); also Chelsea and E. Boston, no data.

[*Blephilia ciliata* Raf. is reported by Dr. Thomas Morong from Ashland, in Dame & Collins, Fl. Middlesex Co., 72, 1888. As this is the only record for this plant in Massachusetts from east of the Connecticut Valley, it is probably a casual introduction, and not a native plant at Ashland.]

COLLINSONIA.

C. canadensis L. Rich woods, rare; Oak Island, Revere, Ipswich, Georgetown, Haverhill, Dracut.

DRACOCEPHALUM.

D. PARVIFLORUM Nutt. Waste places, rare; W. Cambridge (*A. S. Pease*, July 4, 1908); Needham (*T. O. Fuller*, July 10, 1899); S. Hanover (*Mrs. E. A. Josselyn*, June 16, 1899).

D. THYMIFLORUM L. See **RHODORA**, xiii. 212, 1911. Woolwaste dumping ground, Westford (*Miss E. A. Fletcher*, June 27, 1911). Specimen in herb. Bos. Soc. Nat. Hist. A waif from Northern Europe and Siberia.

GALEOPSIS.

G. LADANUM L. Dry sandy ridge above beach at Point of Pines, Revere, also at edge of Oak Island (*Wm. Boott*, September, 1851; other collectors to 1911). Probably extinct, as the area is now largely covered by houses.

G. TETRAHIT L. Waste places, apparently rare; Ipswich, Manchester, Gloucester, Essex, Dedham, Sherborn.

G. TETRAHIT L., var. **BIFIDA** (Boenn.) Lejeune & Courtois. See **RHODORA**, xii. 141–2, 1910. Waste places in moist soil, common.

HEDEOMA.

H. HISPIDA Pursh. Garden weed, Reading (*W. H. Manning*, July 6, 1887). Specimen in herb. N. E. Botanical Club.

H. pulegioides (L.) Pers. Dry ledges and pastures, common.

HYSSOPUS.

H. OFFICINALIS L. Roadside near farm, Burlington (*T. O. Fuller*, Aug. 20, 1893; other collectors till 1899); escape, Georgetown (*Mrs. C. N. S. Horner*, August, 1877).

LAMIUM.

L. ALBUM L. Escaped from gardens at Salem, Saugus, Cambridge and Milton.

L. AMPLEXICAULE L. Weed in gardens and grassland, frequent. A plant with cleistogamous flowers was found in Cambridge, Oct. 23, 1908, by Prof. M. L. Fernald.

L. HYBRIDUM Vill. See **RHODORA**, xi. 55, 1909. Abundant in cultivated ground and grassy border, Hingham (*C. J. Sprague*, July–October, 1889). Specimen in herb. Gray.

L. MACULATUM L. Escaped from cultivation; Medford (*W. J. Child*, May, 1886); Milton (*C. H. Morss*, Aug. 5, 1894).

LEONURUS.

L. CARDIACA L. Waste places, especially in rich soil, common.

LYCOPUS.

L. americanus Muhl. Low ground, common northward, but no reports from southern towns, except Cohasset.

L. europaeus L. Waste ground, Cambridge, Oct. 6, 1894 et seq. Specimens in herb. Gray and Wellesley College.

L. rubellus Moench. Low ground, frequent.

L. sessilifolius Gray. Gravelly shore of Monponsett Pond, Halifax (*Wm. Boott*, Sept. 23, 1870; *C. H. Knowlton & W. P. Rich*, Sept. 23, 1906).

L. uniflorus Michx. Swamps and wet places, common throughout.

L. virginicus L. Wet shores and swampy places, frequent.

MARRUBIUM.

M. vulgare L. Waste land, occasional (13 stations).

MELISSA.

M. officinalis L. Escaped from cultivation at Georgetown, Newbury and Cambridge.

MENTHA.

M. arvensis L. Swamps and wet thickets, common, but not reported from southern towns.

M. arvensis L., var. **canadensis** (L.) Briquet. Frequent.

M. cardiaca Gerarde. Roadsides and moist places at Chelmsford, Lincoln, Weston, Cambridge and West Roxbury.

M. gentilis L. Low ground; Lexington, Lincoln, Belmont, Brookline.

M. piperita L. Brooks and moist places, common.

M. spicata L. Moist soil, frequent.

MONARDA.

M. citriodora Cerv. Parker River mills, Georgetown (*Mrs. C. N. S. Horner*, no date). Specimen in herb. N. E. Botanical Club.

M. didyma L. Introduced by roadsides and in open woods, rare.

M. fistulosa L. Rich woods and pastures and old places, occasional.

M. fistulosa, L., var. **rubra** Gray. Concord (*E. S. Hoar*, August, 1879); roadside, Wellesley (*F. W. Hunnewell*, July 16, 1896).

M. mollis L. Woods and open places at eight scattered stations.

M. PUNCTATA L. Parker River Mills, Newbury (*Mrs. C. N. S. Horner*, September, 1885). Specimen in herb. N. E. Botanical Club.

NEPETA.

N. CATARIA L. Pastures and waste ground, common throughout

M. HEDERACEA (L.) Trevisan. Moist places, occasionally in woods, common.

M. HEDERACEA (L.) Trevisan, var. *PARVIFLORA* (Benth.) Druce. In similar places at eight stations. See *RHODORA*, xxiii. 289, 1921.

OCIMUM.

O. BASILICUM L. Belmont (*Wm. Booth*, Aug. 21, 1866). Specimen in herb. N. E. Botanical Club. A garden annual introduced from India.

ORIGANUM.

O. VULGARE L. Georgetown (*Wm. Oakes*, no date); specimen in herb. Gray, Bos. Soc. Nat. Hist. and Peabody Acad. Sci. Also reported at Hingham by T. T. Bouvé.

O. MARJORANA L. S. Boston (*C. E. Perkins*, Aug. 12, 1878); specimen in herb. N. E. Botanical Club. Native in the Mediterranean countries.

PERILLA.

P. FRUTESCENS (L.) Britton, var. *crispa* (Bentham) Deane n. comb.¹ Waste place, Arlington (*M. L. Fernald*, Sept. 28, 1908). A native of China and Indo-China.

PHYSOSTEGIA.

P. VIRGINIANA (L.) Benth. Roadsides, occasional.

PRUNELLA.

P. VULGARIS L. See *RHODORA*, xv. 179–186, 1913. Fields and waste places, occasional.

P. VULGARIS L., forma *ALBIFLORA* (Bogenhard) Britton. (Vide supra.) Allendale woods, Brookline (*E. & C. E. Faxon*, Aug. 6, 1885).

¹ *PERILLA FRUTESCENS* (L.) Britton, var. *crispa* (Bentham) Deane n. comb. *Dentidia nankinensis* Lour. Fl. Cochinch. 369 (1790).

Perilla ocymoides β *crispa* Benth. in DC. Prod. xii. 164 (1848).

Perilla nankinensis Descne., Rey. Hort. ser. 4, i. 61 (1852).

Perilla ocymoides, var. *nankinensis* Voss in Vilmorin, Blumengärtnerei 846 (1896).

Perilla frutescens nankinensis Britton, Mem. Torr. Bot. Club v. 277 (1894). The name *crispa* must be used for this variety because it is the earliest name in the varietal category applied to the plant.

P. VULGARIS L., var. **lanceolata** (Barton) Fernald. (Vide supra). Fields and moist places, common.

P. VULGARIS L., var. **lanceolata** (Barton) Fernald, forma **candida** Fernald. Open field, Acton (*W. Deane*, June 27, 1885).

P. VULGARIS L., var. **lanceolata** (Barton) Fernald, forma **iodocalyx** Fernald. Fields and moist places, common.

PYCNANTHEMUM.

P. clinopodioides T. & G. Near riverbank, Concord (*H. A. Purdie*, Aug. 26, 1886); specimen in herb. W. Deane; Blue Hill, Milton (*C. E. Faxon*, Aug. 11, 1884; Aug. 17, 1887); specimens in herb. Gray.

P. flexuosum (Walt.) BSP. Dry fields and pastures, well distributed throughout.

P. incanum (L.) Michx. Dry rocky woods, frequent in central towns; apparently rare in Essex Co. and the southern towns.

P. muticum (Michx.) Pers. Roadsides and fields in moist soil, common.

P. verticillatum (Michx.) Pers. Moist fields and open woods, rare; Andover, Billerica, Westford, Nagog Pond [Acton?], Sherborn.

P. virginianum (L.) Durand & Jackson. Fields and roadsides, frequent except in south shore towns.

SALVIA.

S. SCLAREA L. Rubbish heap, Cambridge (*W. Deane*, July 23, 1886); specimen in herb. W. Deane.

S. TILIAEFOLIA Vahl. Rubbish heap. Cambridge (*W. Deane*, Oct. 5, 1885; *M. L. Fernald*, Sept. 26, 1908; Aug. 28, 1913). A Mexican waif.

S. VERTICILLATA L. Field, Sharon (*Miss M. L. Loomis*, Aug. 24, 27, 1908); specimens in herb. Gray and N. E. Botanical Club. Native of Europe and Asia.

SATUREJA.

S. ACINOS (L.) Scheele. Boylston Terrace, W. Medford (*C. H. Morss*, June 21, 1898); specimen in herb. N. E. Botanical Club.

S. HORTENSIS L. Escaped from gardens, rare; Lowell, Charlestown, Boston, Milton.

S. vulgaris (L.) Fritsch. Dry fields and open woods, rare; at ten widely scattered stations.

SCUTELLARIA.

S. ALTISSIMA L. Naturalized at Arnold Arboretum, Boston, foot of Hemlock Hill (*A. Rehder*, Sept. 20, 1913); specimen in herb. N. E. Botanical Club.

S. epilobiifolia Hamilton. (*S. galericulata* of Gray's Manual, 7th ed. See RHODORA, xxiii. 85–6, 1921). Swamps and wet shores, rather common throughout.

S. lateriflora L. Swamps and wet woods, common throughout.

STACHYS.

S. ambigua (Gray) Britton. Moist soil, frequent in western towns also tidal bank of Merrimac River, Newburyport.

S. ARVENSIS L. Freight yard, Somerville (*A. S. Pease*, Oct. 20, 1903); spontaneous in garden, Dorchester (*W. Deane*, Oct. 24, 1884; *J. R. Churchill*, Oct. 18, 1885).

S. BETONICA Benth. One single root in a wood, Newton (*C. J. Sprague*, no date.) Specimen in herb. Bos. Soc. Nat. Hist.

S. hyssopifolia Michx. Salem (*Wm. Edwards*, no date); specimen in herb. Wellesley College. "Appeared mysteriously on the wall at Paradise, Salem, 1824 (Dr. Charles Pickering)," according to J. Robinson, Fl. Essex Co., 83, 1880. Wet shore, Bellingham (*E. & C. E. Faxon*, Aug. 24, 1894; *C. H. Knowlton & W. P. Rich*, Aug. 2, 1908).

S. palustris L. Moist fields, also borders of salt marsh, rare; Ipswich, Burlington, Woburn, Quincy.

S. palustris L., var. **homotricha** Fernald. Byfield [Newbury], Danvers, Reading.

S. tenuifolia Willd., var. **aspera** (Michx.) Fernald. Wet shores and moist places, frequent inland.

TEUCRIUM.

T. canadense L. Moist soil and waste places, rare.

T. canadense L., var. **littorale** (Bickn.) Fernald. Beaches and borders of salt marshes, all along the coast.

T. OCCIDENTALE Gray. Vacant lot, S. Boston (*C. H. Knowlton*, July 29, 1908).

T. occidentale Gray, var. **boreale** (Bickn.) Fernald. Rocky sea shores at Rowley, Gloucester and Rockport.

THYMUS.

T. ovatus Mill. Escaped, Boxford (*Mrs. C. N. S. Horner*, no date). Specimen in herb. N. E. Botanical Club. A native of central Europe.

T. SERPYLLUM L. Dry fields and pastures, occasional.

T. VULGARIS L., var. **VERTICILLATUS** Willk. & Lge. Grassy bank, Wellesley (*K. M. Wiegand*, June 2, 1910). An Italian mountain plant, found also in Corsica.

TRICHOSTEMA.

T. dichotomum L. Dry fields and pastures in sandy soil, very common throughout. White-flowered forms from Revere and Newton.

C. H. KNOWLTON
WALTER DEANE } Committee on Local Flora.

THE ESTUARINE BIDENS OF THE MIRAMICHI.

M. L. FERNALD.

THE peculiar endemic or isolated members of the genus *Bidens* which have been discovered in the tidal reaches from Maryland northward to the estuary of the St. Lawrence have been discussed at various times in the pages of *RHODORA* and we have learned that every considerable estuary in this region is likely to harbor some interesting plant of the genus. It was therefore gratifying, upon stopping to spend the night at Newcastle, New Brunswick, during a return trip from the Gaspé Peninsula with Professor Arthur Stanley Pease, to have our twilight stroll above the city, along the tidal shore of the Miramichi, rewarded by the discovery of another of these colpophilous plants. The Miramichi plant stands exactly between *Bidens hyperborea*, var. *cathancensis* Fernald, *RHODORA*, xx. 149 (1918) of southern Maine and var. *gaspensis* Fernald, l. c. 150, of the Gaspé river-mouths. In its comparatively thin sharply toothed and acuminate leaves, attenuate foliaceous bracts and long awns the Miramichi plant is like the former, but in its conspicuously decumbent or arched-ascending branches, few-flowered heads with only 3–5 very long and mostly serrate bracts it suggests the latter. This plant on account of its habit may be called